Meeting of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction

20 January 2015

English only

2014 Meeting
Geneva, 1–5 December 2014
Item 7 of the agenda
Standing agenda item: Cooperation and assistance, with a particular focus on strengthening cooperation and assistance under Article X

International activities of the Government of Canada related to Article X of the Biological and Toxin Weapons Convention: Update 2014

Submitted by Canada

Background

1. Canada places great importance on cooperation and assistance under Article X of the Biological and Toxin Weapons Convention (BTWC), and remains committed to international cooperation and collaboration in fields related to health and life sciences. Such cooperation is essential to curbing the threat posed by disease, be it naturally occurring, the result of accidental releases from laboratories performing peaceful research, or a deliberate biological weapons attack.

2. In accordance with the Final Declaration of the Seventh Review Conference, in which States Parties are encouraged to submit detailed information on their implementation of Article X at minimum once every second year, Canada has prepared the following non-paper providing details on various ongoing projects organized and/or funded by the Government of Canada that fall under Article X of the BTWC.

3. As Canada considers that a wide range of topics fall under Article X implementation, so too do the projects listed in this non-paper. The projects listed herein aim to:

(a) improve States Parties' capacities to perform surveillance, detection, diagnosis, and containment of infectious disease;

(b) improve capacities to prepare for, assess risks of, and respond to outbreaks of infectious disease, be they the result of naturally occurring pathogens, accidental releases, or biological weapons use; and

(c) provide training in biosafety, biosecurity, and bioethics.

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4. This submission for the 2014 Meeting of States Parties (MSP) contains only projects that were active during calendar year 2014. This non-paper should be viewed in conjunction with four previous papers prepared by Canada on this subject, including a 2009 paper covering international activities in disease surveillance, detection, diagnosis, and containment (BWC/MSP/2009/MX/WP.6), Canada's contribution to the Implementation Support Unit's report on the Implementation of Article X submitted at the Seventh Review Conference (BWC/CONF.VII/INF.8), Canada's paper on international activities in support of Article X at the 2012 and 2013 Meeting of States Parties (BWC/MSP/2012/INF.1) and (BWC/MSP/2013/INF.2).

Projects

Project Title	*Bioterrorism preparedness and response training*
Themes	Disease detection, containment, and response
Dept. Responsible	Global Partnership Program and Counter-Terrorism Capacity Building Program of Foreign Affairs, Trade and Development Canada
Other Partners	Secretariat of the Inter-American Committee against Terrorism (CICTE) of the Organization of American States (OAS)
Project Value	$2,076,000 CAD
Project Duration	2008-2015
Area Affected	Central America, South America, Caribbean
Description	Assist OAS/CICTE Member States better prepare to deal with potential terrorist incidents by engaging senior policy-makers in realistic table-top exercises designed to bring specific issues of contingency planning and threat mitigation to their attention, with the goal of helping them to prepare or improve existing, formal terrorist contingency plans and promote interagency coordination to implement those plans.

Project Title	*Canadian Field Epidemiology Program*
Themes	Response to complex public health emergencies
Dept. Responsible	Centre for Public Health Infrastructure - Health Security Infrastructure Branch of the Public Health Agency of Canada
Other Partners	N/A
Project Value	N.A.
Project Duration	Ongoing
Area Affected	Member-countries of Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET), European Programme for Intervention Epidemiology Training (EPIET), the World Health Organization (WHO), and Pan American Health Organization (PAHO).
Description	PHAC supports global public health capacity building through the development, delivery, and participation in various field

Project Title	*Canadian Field Epidemiology Program*
	epidemiology initiatives. Achieved through: i) involvement with a global network of field epidemiology training programs called "TEPHINET" – which includes over 50 countries and WHO participation ii) involvement with the European Programme for Intervention Epidemiology Training (EPIET) iii) direct involvement and support of WHO global initiatives iv) support to governments directly Activities include: - development and delivery of applied epidemiology and surveillance training (i.e. outbreak response); - provision of technical experts for outbreak response (through WHO and/or other mechanisms) - provision of short-term technical expertise to: ○ assess training and/or other technical needs around surveillance and outbreak response ○ develop and deliver training; ○ participate in expert working groups (i.e. WHO technical working groups around training and professional development) - provision of training opportunities (i.e. invitation to Canadian courses) - collaboration in providing training (i.e., course development and delivery) - participation in international epidemiologic conferences that address training and/or field investigation For example: • Canadian Field Epidemiology Program represents the Americas Region on the TEPHINET Accreditation Working Group (2012 to present) • Canadian Field Epidemiology Program works closely with EPIET to develop and deliver applied epidemiology training • Support to WHO Global Outbreak Alert and Response Network (GOARN) requests for international mobilizations - considered on a case-by-case basis by PHAC Management, and are coordinated by PHAC's Centre for Emergency Preparedness and Response. • Examples of PHAC mobilisations include: • Mobilisation of a PHAC Field Epidemiologist to support the Caribbean Public Health Association with preparedness for a potential imported case of Ebola virus disease; and development of guidelines for managing illnesses on cruise ships, and for the development of a system for reporting illnesses among guests and staff of hotels and cruise ships;

Project Title	*Canadian Field Epidemiology Program*
	• Mobilisation of PHAC Field Epidemiologist to GOARN for public health response to Typhoon Yolanda in the Philippines (February 2014); • Development and delivery of training to support specialised public health surveillance for Mass Gathering events e.g. 2015 PanAm/Para PanAm Games in Toronto; • Support of WHO-CDC Stop Transmission of Polio initiatives (ongoing), deploy field epidemiologists regularly, includes strengthening surveillances; one to Nepal in September – December 2013).

Project Title	*CAPEX*
Themes	CBRNE response training and capability exercise
Dept. Responsible	Royal Canadian Mounted Police
Other Partners	Canada: Public Safety Canada, Royal Canadian Mounted Police – National CBRNE Response Team (ED&TS and NFISS CBRNE) Canadian Forces – Canadian Joint Incident Response Unit (CJIRU), Public Health Agency of Canada (PHAC - NML / MERT), Chemical Support - Defence Research & Development Canada (DRDC) Suffield and Environment Canada, Radiological Support - Federal Radiological Response Team (FRAT), DRDC-Ottawa, Health Canada, Natural Resources Canada United States: US Department of State, US Department of Defence (20th Support Command CBRN) Technical Support Working Group (TSWG), US Department of Justice (FBI HazMat Operations Unit, Hazardous Materials Response Team Unit, Hazardous Materials Science Response Unit and Chemical Radiological Nuclear Sciences Unit) United Kingdom: Home Office (Met Police) Defence Science and Technology Laboratory (dstl), National Police Improvement Agency (NPIA) Australia: Australian Federal Police (AFP), Defence Science and Technology Organization (DSTO)
Project Value	N.A.
Project Duration	Biennial
Area Affected	International event that in 2011 took place in the UK, 2013 in USA and 2015 in Canada.
Description	Canada participated in demonstrating the National CBRNE response team capabilities in separate Chemical, Biological, Radiological, Nuclear and Explosives scenarios centered on device/threat identification and mitigation and eventual intelligence and fast forensics capabilities.

Project Title	*Caribbean Public Health Agency (CARPHA)*
Themes	Disease detection and diagnosis
Dept. Responsible	Office of International Affairs for the Health Portfolio
Other Partners	N/A
Project Value	N/A
Project Duration	2008-ongoing
Area Affected	Caribbean Community (CARICOM)
Description	To ensure the safety and health security of Canadians at home and in the Americas region, the Public Health Agency of Canada (PHAC) continues to support the Caribbean Community (CARICOM) in the ongoing development of the Caribbean Public Health Agency (CARPHA). Located in Trinidad and Tobago, CARPHA became a legal entity in July 2011 and has been operational since January 2013. The establishment of CARPHA involved the integration of five existing regional health institutions into a single self-administered integrated health agency, under the CARICOM governance structure. The goal of CARPHA is to enhance the overall capacity of the Caribbean to effectively address regional public health challenges. PHAC provides in-kind policy and technical support to CARPHA through participation on CARPHA's Technical Advisory Committee (TAC) as well as periodic engagement through CARPHA's laboratory and nutrition working groups. In addition, PHAC is currently involved in two active partnerships with CARPHA: 1. A laboratory twinning initiative (in partnership with Public Health England) to foster the development of capacity in the Caribbean region to monitor and address antimicrobial resistance; and, 2. The deployment of two PHAC epidemiologists to CARPHA to assist with the development of the surveillance components of CARPHA's travel health program –a program which will help to enhance the Region's prevention and response efforts to illness and injuries incurred by international travellers in the region. Support to CARPHA builds upon PHAC's ongoing collaboration with individual countries of the Caribbean and multilaterally with institutions including PAHO and CARICOM. The Government of Canada's Americas Strategy (2012-2017) identifies the Caribbean as a key region of focus, and the CARPHA initiative is included under the second goal "to address insecurity and to advance freedom, democracy, human rights and the rule of law through capacity building."

Project Title	*Caribbean Public Health Agency (CARPHA)*
	CARPHA is currently developing a strategic plan to guide its program priorities for the coming years. PHAC continues to monitor these developments and will work with CARPHA to identify shared priorities, and opportunities for future collaboration through a bilateral workplan.

Project Title	*Contract for an OIE laboratory (or Collaborating Centre) Twinning Project: Technical support to the LNDV for the diagnosis and control of Avian Influenza and Newcastle Disease*
Themes	Disease surveillance, detection, and diagnosis
Dept. Responsible	National Centre for Foreign Animal Disease of the Canadian Food Inspection Agency
Other Partners	World Organization for Animal Health (OIE); National Veterinary Diagnostic Laboratory (LNDV-ICA-Colombia)
Project Value	€ 99,092
Project Duration	Ongoing
Area Affected	Colombia
Description	The project aims to implement laboratory diagnostic methods at the National Veterinary Diagnostic Laboratory of the Colombian Agriculture Institute (ICA) in Bogotá, Colombia for the surveillance, identification and characterization of Avian Influenza and Newcastle Disease viruses. This will be based on OIE Standards and will be accomplished with the support of the parent laboratory, the National Centre for Foreign Animal Disease (NCFAD) located in Winnipeg, Canada. The three-year project will involve direct interactions between scientists and technicians of candidate and parent laboratories. Workshops and hands-on training in select diagnostic test methods and test result evaluation, as well as trouble-shooting, quality assurance, inter-laboratory comparison testing through the exchange of proficiency panels, and reagent preparation will form the basis of the twinning project.

Project Title	*Enhanced biological security and disease surveillance in the Caribbean*
Themes	Disease surveillance, detection, and containment
Dept. Responsible	Global Partnership Program of Foreign Affairs, Trade and Development Canada
Other Partners	Pan-American Health Organization (PAHO); Caribbean Public Health Agency (CARPHA)
Project Value	$2,500,000 CAD
Project Duration	2012-2014
Area Affected	Caribbean
Description	Strengthened biological security and disease diagnostics capacity in the Caribbean region through the fabrication, equipping,

Project Title	*Enhanced biological security and disease surveillance in the Caribbean*
	installation and commissioning of a modular BSL3 laboratory at the Caribbean Epidemiology Centre (CAREC) based in Trinidad and Tobago.

Project Title	*Enhanced biological security and disease surveillance in Jordan*
Themes	Disease surveillance, detection, and containment
Dept. Responsible	Global Partnership Program of Foreign Affairs, Trade and Development Canada
Other Partners	Jordanian Ministry of Health
Project Value	$3,000,000 CAD
Project Duration	2014-2017
Area Affected	Jordan
Description	Strengthened biological security and disease diagnostics capacity in Jordan through the fabrication, equipping, installation and commissioning of a modular BSL3 laboratory at the Jordanian Ministry of Health.

Project Title	*Enhanced biological security and disease surveillance in Jordan*
Themes	Disease surveillance, detection, and containment
Dept. Responsible	Global Partnership Program of Foreign Affairs, Trade and Development Canada
Other Partners	Jordanian Armed Forces Royal Medical Services
Project Value	$950,000 CAD
Project Duration	2014-2017
Area Affected	Jordan
Description	Strengthened biological security and disease diagnostics capacity in Jordan through the fabrication, equipping, installation and commissioning of a mobile laboratory.

Project Title	*European Enforcement Project*
Themes	Capacity Building
Dept. Responsible	Centre for Biosecurity – Health Security Infrastructure Branch of the Public Health Agency of Canada
Other Partners	International partners
Project Value	N/A
Project Duration	Ongoing

Project Title	*European Enforcement Project*
Area Affected	Global
Description	The European Enforcement Project (EEP) annual meeting of federal inspectors responsible for human pathogens in the European Union (EU) and forms a Europe-wide network for inspectors and inspectorates of the EU Member States to exchange experiences (breaches and failures of biocontainment, threats, etc.) and establish methodologies for the harmonisation of approaches to inspection and enforcement of work with contained use of microorganisms. Since 1997 network members have produced practical documents such as procedures and checklists for inspection, guidance on sampling methodologies, hosted shared inspection visits of facilities and deliberate release sites, and held annual conferences. As the sole non-EU member permitted entry into these closed-door meetings, PHAC's participation in these frank discussions by federal authorities allows PHAC a unique opportunity to share international best practices and lessons.

Project Title	*Global Health Security Agenda (GHSA)*
Themes	Biosecurity and Biosafety
Dept. Responsible	Office of the International Affairs (OIA) for the Health Portfolio
Other Partners	Other Government of Canada Departments and Agencies, GHSA countries and international organizations
Project Value	N/A
Project Duration	2013-2019
Area Affected	This is a global initiative
Description	The GHSA is a five-year initiative which aims to strengthen multi-sectoral action in support of health security, and to assist countries in meeting relevant international obligations, including the International Health Regulations (IHRs) (2005). Under the GHSA, partner countries and international organizations are engaged in a process to identify new or expanded work areas for the prevention, detection and response to infectious disease globally, regardless of their origin (i.e. natural, intentional or accidental). In close cooperation with its GHSA partners, Canada aims to support the development of infrastructure for national biosafety and biosecurity frameworks. The development of training tools in the areas of biological risk management and national framework development, implementation, monitoring and enforcement is an example of contribution that Canada is currently exploring under the GHSA.

Project Title	*Global Health Security Initiative (GHSI) – Global Health Security Action Group (GHSAG)*
Themes	Disease surveillance
Dept. Responsible	Office of the International Affairs (OIA) for the Health Portfolio
Other Partners	Other GHSI/GHSAG Members, and the World Health Organization
Project Value	N/A
Project Duration	2001 - Ongoing
Area Affected	Canada, European Commission, France, Germany, Italy, Japan, Mexico, the United Kingdom, the United States
Description	The Global Health Security Initiative (GHSI) is an informal, international partnership between G7 countries, Mexico and the European Commission to strengthen health preparedness and response globally to threats of chemical, biological, radio-nuclear (CBRN) terrorism and pandemic influenza. Through the GHSI, Health Ministers from Canada, France, Germany, Italy, Japan, Mexico, the United Kingdom and the United States, as well as the European Commission and the World Health Organization (observer), discuss global trends and emerging CBRN threats to identify areas for collaborative work. In support of the Initiative, the Global Health Security Action Group (GHSAG) provides GHSI countries with an opportunity to share trusted information on issues of international concern with respect to CBRN and pandemic threats, and to facilitate the development of collaborative tools with the objective to improve emergency preparedness in the long term as well as immediate response to health crisis. The GHSAG is composed of a series of working groups that carry-out work mandated by GHSI Ministers, build the common evidence base, and advance policy and scientific cooperation among members. Canada is an active member of the GHSI/GHSAG. The GHSI Secretariat is hosted by the Office of International Affairs for the Health Portfolio. The Public Health Agency of Canada also acts as the chair of the Global Laboratory Network, as well as the co-chair of the Risk Management and Communications Working Group (RMCWG), along with the United Kingdom. One of the RMCWG priorities is to develop a framework to improve the collective and individual GHSI member capacity to manage health security arising from emerging life sciences technologies (including synthetic biology), more specifically for their potential for unintended adverse consequences or dual-use.

Project Title	*Global Health Security Action Group (GHSAG) – Lab Network*
Themes	Disease surveillance
Dept. Responsible	Infectious Disease Prevention and Control Branch of the Public

Project Title	*Global Health Security Action Group (GHSAG) – Lab Network*
	Health Agency of Canada
Other Partners	Other members of the GHSAG, WHO (Observer)
Project Value	N/A
Project Duration	2001 – Ongoing
Area Affected	Canada, the European Commission, France, Germany, Italy, Japan, Mexico, the United Kingdom, the United States
Description	In the wake of the 9/11 terrorist attacks, laboratory representatives from the G7 countries and Mexico met to share their concerns and capabilities and to discuss ways of working more collaboratively together. These meetings resulted in the establishment of a laboratory network as part of the Global Health Security Action Group (GHSAG). The Infectious Disease Prevention and Control Branch's National Microbiology Laboratory (NML) plays a central role in coordinating the activities of the laboratory network of GHSAG and is the home of the lab network secretariat. The Lab network's objective is to ensure GHSAG member laboratories work together to support the GHSI and GHSAG activities by: • Ensuring a coordinated and validated diagnostic capability for bioterrorist threat agents; • Mapping the diagnostic capacity of member laboratories • Discussing, sharing, and providing training in new diagnostic methods; • Improving the response capability; • Contributing to global surveillance for biothreats and sharing information with GHSAG member laboratories; • Providing a mutual surge capacity; • Liaising with other working groups and their secretariats; and, • Ensuring that minimal common standards for bio-safety and bio-security guidelines are in place at all GHSAG laboratories. Between 2010 and 2012 the NML in collaboration with other PHAC, Health Canada and Defense participants contributed to the development of a biological Threat Risk Assessment Tool under the leadership of Germany. In addition, the NML has participated and/or hosted several workshops including an Unknown pathogen detection workshop (CAN/UK) in 2012. Finally, the GHSAG Laboratory Network continues to work together to establish closer technical linkages with and support of other networks such as the Emerging Dangerous Pathogen

Project Title	*Global Health Security Action Group (GHSAG) – Lab Network*
	Laboratory Network (EDLPN), The International Federation of Biosafety Associations (IFBA), and with Coordinating Organizations for Regional Disease Surveillance (CORDS). The Laboratory Network has identified Dual Use Research of Concern (DURC) as a critical initiative to be undertaken.

Project Title	*International Expert Group on Biosafety and Biosecurity Regulation – IEGBBR (formerly the Global Human Pathogens Biosafety and Biosecurity Group)*
Themes	Capacity Building
Dept. Responsible	Centre for Biosecurity – Health Security Infrastructure Branch of the Public Health Agency of Canada
Other Partners	International partners
Project Value	N/A
Project Duration	Ongoing
Area Affected	Global
Description	This group was initiated in 2007, with the first meeting in Ottawa, Canada. The fourth biennial meeting of this group took place in Atlanta, Georgia, USA, March 19-21, 2013 with 20 participants from 13 countries, including Canada, and the World Health Organization and saw the participation of 2 new countries. Meeting participants are mainly regulatory personnel representing competent authorities, as well as personnel involved in promoting biosafety and biosecurity standards and culture in their country. The meetings provide an opportunity for United Nations members to network, cooperate, and develop expertise to promote a more global or mutual response to emerging biosafety and biosecurity issues and threats.

Project Title	*Joint US-Canada Science and Technology Collaboration for Animal Health Threats*
Themes	Disease surveillance, diagnosis, risk assessment, preparedness, and response
Dept. Responsible	Canadian Food Inspection Agency
Other Partners	USDA's Agricultural Research Service, USDA's Animal and Plant Health Inspection Service, US Department of Homeland Security, DRDC's Centre for Security Science, RCMP
Project Value	N/A
Project Duration	Ongoing
Area Affected	Canada -US
Description	The objective of this initiative is to develop a coordinated and strategic science and technology (S&T) collaboration in risk assessment, surveillance, diagnostics, preparedness, response, research and strategic planning to enhance both countries' capabilities to respond, individually or jointly, to intentional and

Project Title	*Joint US-Canada Science and Technology Collaboration for Animal Health Threats*
	unintentional animal health threats. The collaboration includes examining the trends, current status and gaps regarding emerging animal health threats and by identifying joint actions to address capacity development needs. Bilateral working groups have been established, including Surveillance and Diagnostics, Risk Assessment, Preparedness, Response and Research Coordination. A web-based share point serves as an effective communication tool for this bilateral collaboration initiative. The program is being expanded to include efforts to leverage our knowledge and capabilities in the area of emerging vector-borne diseases of common interest for both countries. This collaboration should also increase Canada-US effectiveness if called upon to support another country if requested, per Article VII.

Project Title	*Laboratory Response Network (LRN)*
Themes	Disease surveillance, detection, and diagnosis
Dept. Responsible	Public Health Agency of Canada (National Microbiology Laboratory), National Defence (Defence Research and Development Canada – Suffield).
Other Partners	US Centres for Disease Control and Prevention.
Project Value	N/A
Project Duration	Ongoing
Area Affected	Worldwide
Description	The Public Health Agency of Canada directs the Canadian Laboratory Response Network in partnership with the USA CDC Atlanta, to provide oversight of the provincial public health laboratories within Canada to ensure an efficient, expeditious Canadian public health response to threat agents that may arise within the Canadian Public Health Care system. Partnership with the USA LRN networks Canada with the USA and their partners of approximately 160 US and international laboratories in the United Kingdom, Australia, Mexico, Republic of Korea, and Canada. The mission of the LRN and its partners will develop, maintain, and strengthen an integrated national and international network of laboratories that can respond quickly to needs for rapid testing, timely notification and secure reporting of results associated with acts of biological or chemical terrorism and other high priority public health emergencies.

Project Title	*Laboratory Safety and Quality Management*
Themes	Laboratory containment, safety and security, disease surveillance, detection, and diagnosis.
Dept. Responsible	National Microbiology Laboratory and Centre for Biosecurity - Public Health Agency of Canada
Other Partners	N/A

Project Title	*Laboratory Safety and Quality Management*
Project Value	In Kind
Project Duration	2014-2016
Area Affected	China
Description	Under the 2014-16 Plan of Action for Canada-China Health Cooperation, the Public Health Agency of Canada will continue to support close cooperation and timely information sharing on laboratory safety and quality management. This will include a technical exchange and the sharing of best practices to help build capacity for high containment laboratories in China (i.e., laboratories that handle and store risk group 3 or 4 human pathogens) and a bio-bank building. Agency support may include site visits, personnel exchanges, workshops or training.

Project Title	*Memorandum of Understanding Concerning Research, Development and Acquisition of Chemical, Biological and Radiological Defense Materiel (CBR MOU)*
Themes	Capability development of medical countermeasures, detection and diagnostics
Dept. Responsible	Defence Research and Development Canada
Other Partners	Australia, United Kingdom, United States
Project Value	N/A
Project Duration	Ongoing
Area Affected	Australia, Canada, United Kingdom, United States
Description	The CBR MOU encompasses cooperative research, development, testing, acquisition, destruction and disposal of Chemical, Biological and Radiological defence materiel, whose maturation may leads to enhancements of the national CBR defense posture. This MOU provides the means for AS/CA/UK/US to initiate, conduct and manage information exchange, harmonize and align efforts and conduct cooperative CBR Projects. Furthermore, the MOU provides the means for each nation to acquaint each other with any CBR issues in order to avoid unnecessary duplication of national CBR defense programs and collaborate to develop CBR defence capabilities to close any gaps. Collaborative activities include: • Development of medical countermeasures (drugs, vaccines and diagnostic tests) to CBR threats and emerging infectious diseases • Hazard assessment, risk, threat and operational impact analyses to provide evidence-based support for strategic and operational level decision making. • Development of information systems and S&T required to enhance early warning and reporting and real-time situational awareness of CBR

Project Title	*Memorandum of Understanding Concerning Research, Development and Acquisition of Chemical, Biological and Radiological Defense Materiel (CBR MOU)*
	threats • Development of improved capability options to provide physical protection and hazard management technologies to protect people, equipment and infrastructure against CBR threats

Project Title	*Memorandum of Understanding Concerning Research, Development and Acquisition of Chemical, Biological and Radiological Defense Materiel (CBR MOU) -Medical Countermeasure Consortium (MCMC)*
Themes	Disease preparedness, diagnosis, and treatment.
Dept. Responsible	Department of National Defence
Other Partners	Public Health Agency of Canada, Defence and Health from United States, United Kingdom, and Australia
Project Value	N/A
Project Duration	Ongoing
Area Affected	Australia, Canada, United Kingdom, and United States.
Description	The CBR MOU Medical Countermeasures Consortium (MCMC) is a joint collaboration between Defence and Public Health partners from four nations (Australia, Canada, United Kingdom and United States). The purpose of the MCMC is to address defence and public health medical countermeasure requirements across all levels of technology readiness: from early phase research and development through to advanced development; to enable the effective fielding or delivery of medical countermeasures (MCMs) against chemical, biological and radiological threats and emerging infectious diseases. MCMs are defined as drugs, vaccines and diagnostic tests. The MCMC is responsible for identifying and recommending deliverables and collaborative activities in any area which strengthen our collective preparedness posture to CBR threat agents and emerging infectious diseases, by addressing capability gaps and advancing the development and delivery of medical protection capabilities. Currently the MCMC has identified several task groups under the MCMC, including: Point of Care (POC) Diagnostics, Antimicrobial Resistance (AMR), Ricin MCMs, Filoviruses, and Stockpile Sharing.

Project Title	*Mitigating Biological Security Risks in South-East Asia*
Themes	Biocontainment, biorisk management, biosafety, disease surveillance
Dept. Responsible	Global Partnership Program of Foreign Affairs, Trade and

Project Title	*Mitigating Biological Security Risks in South-East Asia*
	Development Canada
Other Partners	WHO, APL network, BioDiaspora, CORDS, INTERPOL, Wilton Park
Project Value	$6,500,000 CAD
Project Duration	2013-2015
Area Affected	South-East Asia
Description	In partnership with ASEAN member countries, Canada is implementing a project to strengthen capacities to detect, rapidly identify and diagnose highly dangerous pathogens and emerging infectious diseases (e.g. H7N9) that present global threats. Project activities will also enhance existing regional disease surveillance networks and promote regional coordination and cooperation.

Project Title	*Mobile Lab – Public Health Agency of Canada*
Themes	Disease diagnosis and containment
Dept. Responsible	Microbiological Emergency Response Team (MERT) - Infectious Disease Prevention and Control Branch of the Public Health Agency of Canada
Other Partners	N/A
Project Value	N/A
Project Duration	As needed
Area Affected	Worldwide, where needed (mobile)
Description	The National Microbiology Laboratory (NML) of the Infectious Disease Prevention and Control Branch of PHAC maintains and operates scalable state-of-the-art mobile laboratory options that can be deployed to fill a variety of needs: to respond to emergency outbreak situations anywhere in the world, to assist with site security at high profile events when required, and to respond to possible bioterrorism incidents if one were to occur. These deployable units can span the range of a "lab in a box", able to be checked on commercial aircraft (what is used for remote, rapid response); a "mobicon", a true containment level 2 in a trailer format that can be shipped by plane on very short notice; and a mobile truck lab with true containment level 3/4 capabilities that is usually used for preplanned deployment or forensic exploitation to triage all exhibits for biological contamination from a bio-crime scene. In the realm of rapid emergency outbreak response, team(s) of PHAC scientists have been deployed with the units at the request of the Royal Canadian Mounted Police, who lead the Canadian National CBRNE team and the WHO's Global Outbreak and Response Network (GOARN). Team members work closely with the RCMP for security deployments, as well as with WHO, local officials and other attending partners, and have extensive experience operating in the most remote areas of the world and the

Project Title	*Mobile Lab – Public Health Agency of Canada*
	highest risk situations. Since 2003, the mobile laboratory units have responded to outbreaks of Nipah virus in Bangladesh, Crimean Congo hemorrhagic fever in Iran, SARS in Hong Kong and Chine (2003 and 2004), Avian influenza in Vietnam, Marburg virus in Angola and Rift Valley fever in Kenya and Ebola virus in the Democratic Republic of the Congo (2003, 2007, 2012) and Seirra Leone in 2014. In addition to responding to infectious disease outbreaks and security events, PHAC's Microbiological Emergency Response Team (MERT) provides training to national and international partners involving mobile laboratory operations, in-field identification of biological agents, sampling procedures and coordination/execution of response exercises in their role within Canada's National CBRNE team. MERT also supports national security operations, through mobile laboratory deployment and the development of site security and laboratory response plans. The NML has supported deployments for site security and bio-threat response exercises such as the Summit of Americas in Trinidad and Tobago (2008 and 2009), Beijing (2008), Francophone Summit (2008), CAPEX (2008, 2010, 2012), Mexico/H1N1 (2009), Vancouver 2010 Olympics, G8/G20 Summits (2010), United Nationals Secretary General Mechanism for the Alleged Use of Biological Warefare Agents (2014) and the annual Canadian National CBRNE team exercise, FireDrake, including the international and national emergency deployments as needed. The capacity is constantly evolving to evaluate, validate and incorporate newer, faster testing platforms, equipment and procedures. In addition, the establishment and expansion of the Canadian Laboratory Response Network by the NML serves to increase response capabilities within the country through dissemination of reagents to provincial partners for rapid local identification of Select Agents.

Project Title	*National Microbiology Laboratory (NML) Prion Diseases Program (PDP)*
Themes	Disease surveillance and diagnosis
Dept. Responsible	Infectious Disease Prevention and Control Branch of the Public Health Agency of Canada
Other Partners	Health Canada, Canadian Food Inspection Agency
Project Value	N.A.
Project Duration	Ongoing
Area Affected	All 11 members of EUROCJD – Australia, Austria, Canada, France, Germany, Italy, Netherlands, Slovakia, Spain, Switzerland, and UK
Description	The NML Prion Diseases Program (PDP) is the only public health program for human prion diseases in Canada. PDP provides national leadership by conducting surveillance, performing research and delivering diagnostic technical services to minimize infectious risks posed to Canadians by these rare, transmissible,

Project Title	*National Microbiology Laboratory (NML) Prion Diseases Program (PDP)*
	lethal degenerative brain diseases. Activities include comprehensive detection and detailed characterization of all cases of human prion diseases that occur in Canada; tracking of rates and investigation of causes; development and validation of improved technologies for earlier and more accurate diagnosis; and studies of biological mechanisms of disease. Internationally, PDP is a member of an 11-country surveillance consortium (the European Creutzfeldt-Jakob Disease Surveillance Network) with the goals of sharing data, establishing best practices and optimizing global approaches to public health for human prion diseases. These activities are also considered essential to help Canada deal with trade issues arising from animal prion diseases with zoonotic potential, such as bovine spongiform encephalopathy (BSE) and Chronic Wasting Disease (CWD). PDP works on this level with the Canadian Food Inspection Agency and Health Canada, as part of an interdepartmental federal program to respond to BSE. Other federal partners include Canadian Blood Services and Héma-Québec, and other international linkages include the US FDA and the World Health Organization.

Project Title	*NATO Exercise Precise Response (Biological Training Exercises)*
Themes	CBRNE response training and capability exercise
Dept. Responsible	National Defence (Defence Research and Development Canada – Suffield)
Other Partners	NATO Partners
Project Value	1,000,000 CAD
Project Duration	Ongoing
Area Affected	Worldwide
Description	Exercise Precise Response is an annual military CBRNE exercise that occurs at DRDC Suffield. Participating countries are trained in scenarios involving CBRNE agents and materials. Additionally, laboratory testing capabilities are exercised during this programme. Annually 8-10 countries participate in this exercise and knowledge transfer occurs between partner countries. This exercise enhances the readiness and capabilities of NATO countries to respond to CBRNE incidents.

Project Title	*NATO NAAG (NATO Army Armament Group) DIMP (Detection, Identification and Monitoring Panel) and Standoff Team*
Themes	CBRN detection/monitoring international collaborative group
Dept. Responsible	National Defence (D CBRN D and Defence Research and Development Canada – Valcartier)
Other Partners	NATO Partners
Project Value	N/A

Project Title	*NATO NAAG (NATO Army Armament Group) DIMP (Detection, Identification and Monitoring Panel) and Standoff Team*
Project Duration	Ongoing
Area Affected	NATO Countries
Description	AREA OF RESPONSIBILITY The DIMP is responsible for the joint technical, testing and operational aspects of CBRN detection, sampling, identification and monitoring. These functions are needed to detect and characterize CBRN events, identify the agents and hazards, delineate areas of contamination, and monitor the changes to inform CBRN force protection actions as required. MISSION The DIMP will take forward JCBRND CDG efforts as outlined in the Joint Priority Assessment and Work Schedule (JPAWS) to provide technical and operational advice, foster interoperability, and establish technical and operational standards in the areas of CBRN detection, sampling, identification, and monitoring. This includes providing information – up to unequivocal proof – concerning the first use of Biological, Chemical and Radiological Agents to NATO political and military authorities to support timely decisions concerning NATO response.

Project Title	*Procinorte – Animal Health Task Force*
Themes	Disease surveillance, diagnosis, risk assessment, and preparedness
Dept. Responsible	Canadian Food Inspection Agency
Other Partners	United States Department of Agriculture (USDA)'s Agricultural Research Service (ARS) and Mexico's Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP) and Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimentaria (SENASICA).
Project Value	N.A.
Project Duration	Ongoing
Area Affected	Mexico-US-Canada
Description	Procinorte is a mechanism to promote the cooperation in research and technology transfer in the Northern Region for a competitive and sustainable agricultural development. The objectives of Procinorte are: • To promote dialogue to identify priority research issues common to the three countries and to influence the regional, hemispheric and global agendas. • To facilitate the exchange of experiences, information and training through building linkages among public and private country institutions of the Northern Region and with the

Project Title	*Procinorte – Animal Health Task Force*
	major research and technology transfer actors in the region, the hemisphere and the world. • To facilitate collaboration among the countries to solve problems of mutual interest. Procinorte task forces include: Animal Health, Agricultural Libraries and Information Services, Genetic Resources, Tropical and Subtropical Fruits, Plant Health. Activities of the Animal Health Task Force (AHTF) have included workshops on animal influenzas (H1N1 pandemic influenza; wet workshop on influenza 'A' virus molecular diagnostic techniques; Mexican outbreak of H7N3 highly pathogenic avian influenza) bovine spongiform encephalopathy (two workshops) and bovine tuberculosis (two workshops). The above workshops have enabled scientists from the three countries to share experiences, information and hands-on approaches in the above areas and to promote networking, friendship and trust in the process. The AHTF also aims to identify and discuss ways in which the three countries could harmonize diagnostic methods for animal disease and manage outbreaks. This tri-national collaboration has successfully involved the animal health regulatory agencies of the three member countries and promoted scientific networking. A web based share point serves as a central communication tool for the task force members.

Project Title	*Optimisation, harmonisation and standardisation of real-time QuIC analysis of CSF in the diagnosis of sporadic Creutzfeldt-Jacob disease.*
Themes	Disease surveillance and diagnosis
Dept. Responsible	Infectious Disease Prevention and Control Branch of the Public Health Agency of Canada at the National Microbiology Laboratory
Other Partners	EU Joint Programme - Neurodegenerative Disease Research (JPND) Consortium
Project Value	N/A
Project Duration	Ongoing
Area Affected	The 10 member countries/ of the JPND Consortium: Australia, Canada, France, Germany, Italy, Poland, U.S.A., Australia, Japan and the U.K.
Description	The focus of the Consortium is the optimisation of a recently developed analytical procedure called real-time quaking-induced conversion (RT-QuIC) which detects disease-associated prion protein in cerebrospinal fluid (CSF) of patients with sporadic Creutzfeldt-Jakob disease (sCJD). A second ring-trial was distributed to all member laboratories in November 2014. In the evaluation of this proficiency panel the NML Prion Laboratory Services (PLS) achieved 100% sensitivity and specificity.

Project Title	*Optimisation, harmonisation and standardisation of real-time QuIC analysis of CSF in the diagnosis of sporadic Creutzfeldt-Jacob disease*
	RT-QuIC represents a major advance in the development of a disease specific pre-mortem diagnostic test for CJD. In addition to aiding physicians making decisions on the diagnoses and treatment of patients, international recognition of Canadian CJD surveillance data is economically important in that it is a factor taken into consideration by the World Organization for Animal Health (OIE) when deciding on the bovine spongiform encephalopathy (BSE) status of the Canadian cattle herd. Canada currently has "controlled BSE risk" status, in the middle of the OIE's three tiered system. Implementation of RT-QuIC will support Canada's application for "negligible BSE risk" status. Countries with "negligible BSE-risk" status may enjoy broader market access for a range of beef and beef by-products compared to countries with "controlled BSE-risk" status.

Project Title	*PulseNet*
Themes	Disease surveillance and outbreak detection and response
Dept. Responsible	Infectious Disease Prevention and Control Branch of the Public Health Agency of Canada
Other Partners	Other countries using PulseNet
Project Value	N/A
Project Duration	Ongoing
Area Affected	Other countries using PulseNet
Description	Foodborne and waterborne diseases due to bacterial pathogens result in substantial human health and economic burdens. Strong national, molecular-level surveillance for these diseases are critically important. PulseNet Canada is a laboratory network that comprises the provincial public health laboratories as well as the Canadian Food Inspection Agency (CFIA). Through this network, the DNA "fingerprints" of cases of foodborne and waterborne bacterial disease across the country are centrally analyzed in real time (i.e., as the cases occur). Because of this electronic surveillance, data sharing and analysis, outbreaks caused by bacteria such as Salmonella, Listeria, E. coli, and Shigella are detected at the earliest possible stage, facilitating timely public health interventions including, for example, food recalls. PulseNet Canada utilizes Virtual Private Network (VPN) connections that directly link the databases of the member laboratories, plus a secure discussion board hosted by CNPHI for communications among partners. PulseNet Canada provides training and Quality Assurance for all member laboratories to ensure the highest quality, reliable data are consistently generated. Data are also shared across international jurisdictions through the PulseNet International network, which is comprised of 82 countries spanning Central and South America, Europe, the Middle East, Sub-Saharan Africa, and the Asia-Pacific region; this facilitates the

Project Title	*PulseNet*
	identification of emerging regional and global trends. Additionally, Canada and the United States participate in a bilateral Memorandum of Understanding that enables real-time sharing and direct access to national-level foodborne disease data, ensuring that outbreaks and emergencies that span (or potentially span) both sides of the border can be identified and investigated without delay. This MOU was initially signed in 2005 and was renewed in 2010. The National Microbiology Laboratory is leading the implementation of whole genome sequencing, which will ultimately replace traditional molecular DNA fingerprinting techniques in PulseNet. This work is being done with provincial and federal partners as well as global counterparts via PulseNet International. Implementation of whole genome sequencing is expected to significantly improve the timeliness and accuracy of enteric disease outbreak and response in Canada and across the world.

Project Title	*Real Property Safety and Security*
Themes	Disease containment
Dept. Responsible	Infectious Disease Prevention and Control Branch of the Public Health Agency of Canada
Other Partners	Broad list of international partners
Project Value	N/A
Project Duration	Ongoing
Area Affected	Worldwide
Description	Real Property Safety and Security (RPSSD) has established a leadership role both nationally and internationally in the Operation and Maintenance of High Containment laboratories by providing among other things: • Peer review for new high containment facilities in many countries; • Being a technical resource to other countries and design teams; • Bench Marking of facility O&M costs; • Leadership in decontamination technologies; • Commissioning support to foreign laboratories, and; • Provision of technical expertise to the high containment community RPSSD, in conjunction with the International Center for Infectious Diseases, hosted the 7th annual International High Containment Operations and Maintenance Workshop. This workshop addresses the increasing needs of facility operators, maintenance and

Project Title	*Real Property Safety and Security*
	operations staff for training in relevant aspects of bio-containment facilities and fills a critical need within the operations and maintenance community. The 2014 workshop was attended by 24 participants from 13 countries. RPSSD has ongoing collaborations with Public Health England as it plans for the construction of a new positive pressure suit Containment Level 4 laboratory. RPSSD hosted The Peter Doherty Institute of the University of Melbourne. Efforts are being made to develop stronger collaborative ties between Facility Management professionals at High Containment laboratories. RPSSD has individuals contributing under the European Committee for Standardization Working Agreement (CEN/CWA) for the development of the Laboratory Bio-Risk Management System.

Project Title	*Regional Biosecurity Training Centre in Jordan*
Themes	Biorisk management, biosecurity, biosafety, disease surveillance
Dept. Responsible	Global Partnership Program of Foreign Affairs, Trade and Development Canada
Other Partners	United States, United Kingdom
Project Value	$1,100,000 CAD
Project Duration	2013-2015
Area Affected	Middle East
Description	Canada is helping create regional capacity that will assist countries across the Middle East and beyond in addressing pressing challenges related to bioterrorism and the spread of infectious diseases. The training centre, once complete, will help strengthen laboratory biosecurity and biosafety practices, and provide instruction on infectious disease detection and characterization techniques.

Project Title	*Strengthening Biological Security in Ghana*
Themes	Biocontainment, biorisk management, biosafety, disease surveillance
Dept. Responsible	Global Partnership Program of Foreign Affairs, Trade and Development Canada
Other Partners	
Project Value	$4,400,000 CAD
Project Duration	2012-2015
Area Affected	Ghana

Project Title	*Strengthening Biological Security in Ghana*
Description	Canada is implementing security and biocontainment measures at three facilities of Ghana's Veterinary Services Directorate (VSD) lab network.

Project Title	*Strengthening Biological Security in Nigeria*
Themes	Biosecurity, biocontainment, biorisk management, disease surveillance
Dept. Responsible	Global Partnership Program of Foreign Affairs, Trade and Development Canada
Other Partners	N/A
Project Value	$2,150,000 CAD
Project Duration	2012-2015
Area Affected	Nigeria
Description	Canada is implementing urgently-needed biosecurity and biosafety improvements and providing disease diagnostics capacity at a veterinary facility in central Nigeria.

Project Title	*Trichinella diagnostics, Proficiency Testing and Lab Certification for Trichinella Testing*
Themes	Disease surveillance
Dept. Responsible	Canadian Food Inspection Agency
Other Partners	OIE, International Commission on Trichinellosis, and National reference labs in EU, US, etc.
Project Value	N.A.
Project Duration	Ongoing
Area Affected	Worldwide
Description	Advice and participation to draft international standards and quality assurance mechanisms for the detection of Trichinella in pork and wildlife, and Certification of Trichinella Testing Labs. Confirmatory testing of positive international samples.

Project Title	*Support for Ebola Response*
Themes	Biosecurity, biocontainment, biorisk management, disease surveillance
Dept. Responsible	Global Partnership Program of Foreign Affairs, Trade and Development Canada
Other Partners	WHO, Public Health Agency of Canada
Project Value	$6,300,000 CAD

Project Title	*Support for Ebola Response*
Project Duration	2014-2015
Area Affected	West Africa
Description	Canada is addressing international security-relevant aspects of the Ebola response effort (e.g. provision and delivery of PPE) and to the Public Health Agency of Canada (PHAC) to support deployment of two mobile laboratories and expert diagnostic teams to Sierra Leone.

Conclusion

5. This paper is intended to show only a brief overview of Canada's international activities related to this year's BTWC program of work. For additional information on Canada's projects, please contact Francis David-Giasson at the Non-Proliferation and Disarmament Division by phone at +1-343-203-3184 or by e-mail at francis.david-giasson *a* international.gc.ca. Additionally, to get in contact with the organizations that fund these projects, please consult Canada's entry on the Article X database.

Meeting of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction

13 February 2015

English only

2014 Meeting
Geneva, 1-5 December 2014
Item 7 of the agenda
Standing agenda item: Cooperation and assistance, with a particular focus on strengthening cooperation and assistance under Article X

Report on Implementation of Article X of the Convention

Submitted by India

1. India is firmly committed to fulfilling all of its obligations under the BWC and in particular, attaches high importance to the full and effective implementation of Article X of the Convention. The promotional aspects related to cooperation and assistance are crucial elements in strengthening of the Convention and in achieving universal adherence. India has regularly shared its experiences in implementation of Article X in BWC meetings including during the Seventh Review Conference.

2. India supports the position of NAM and Other States Parties to the BWC that full, effective and non-discriminatory implementation of Article X is an integral and essential part of compliance with the Convention and supports the proposal on Article X submitted at the Seventh Review Conference.

3. India has developed significant capabilities in biological sciences and technology for peaceful purposes and places considerable emphasis on broadest possible international cooperation in this field, in particular with developing countries. This is consistent with Article X which embodies an international commitment to partnership, assistance, sharing of information, exchanges and the development of mutually beneficial outcomes. The following provides an overview of India's engagement – both bilateral and multilateral, of relevance to the implementation of Article X.

4. India has extensive cooperation in the health sector and medicine with a large number of countries. In the period since 2012, MOUs/agreements or other arrangements for cooperation in this sector were entered into with: Bangladesh, Bhutan, United Kingdom of Great Britain and Northern Ireland, Yemen, Indonesia, Maldives, Netherlands, Kuwait, Viet Nam, Myanmar, Madagascar, Uganda, Kenya and Lesotho.

5. India has cooperative programmes with the United States of America, the United Kingdom of Great Britain and Northern Ireland and Canada for development of technologies for disease surveillance, diagnosis and control. In the field of biotechnology, India also has cooperative programmes with Finland, Germany, Sweden, Brazil and Viet

Nam. Joint Partnership programmes in the fields of health, food and nutrition security are underway with the Bill and Melinda Gates Foundation.

6. India has supported the role of the World Health Organization, the Food and Agricultural Organization and the World Organization for Animal Health and implements various regulations including the WHO's 2005 International Health Regulations. India supports enhancing effective cooperation and coordination between relevant international and regional organizations for use of biological agents and toxins for peaceful purposes. India has been regularly reporting on outbreaks of infectious diseases, not only those that are mandatory to notify but also all the other re-emerging and newly emerging diseases. As and when required, India has sought cooperation from foreign partners for advanced technologies for surveillance, detection, and diagnosis of highly infectious and pathogenic agents which can cause diseases in humans and animals.

7. India has produced and supplied diagnostic kits for some emerging and re-emerging infectious diseases such as Japanese Encephalitis, Dengue and Chikungunya to other developing countries through the WHO SEARO. The diagnostic kits developed by India are cost-effective as compared to other available products and therefore better suited for needs of developing countries. India has also provided through the WHO and bilaterally (Timor-Leste Myanmar, Nepal) reagents helpful for diagnosis of a number of diseases including H1N1, H5N, MERS CoV etc. India has provided technical expertise in recent years to countries such as Nepal, Timor-Leste, Myanmar, Indonesia and Thailand. In training courses organized in India, participants from the following countries participated: Bangladesh, Bhutan, Myanmar, Thailand, Indonesia, Nepal, Sri Lanka and Timor-Leste. India has also conducted a workshop on biosafety and biosecurity for participants from Nepal and Bangladesh.

8. In the field of plant health and protection, a number of training programmes were organized in India, both bilaterally or through regional bodies such as SAARC, which had participants from a number of countries including: Afghanistan, Bhutan, Bangladesh, Brunei, Cambodia, Egypt, Indonesia, the Islamic Republic of Iran, Lao People's Democratic Republic, Malaysia, Maldives, Myanmar, Namibia, Nepal, Pakistan, Peru, Philippines, Sri Lanka, Tajikistan, Thailand, Uzbekistan and Viet Nam. Similarly, in the field of animal Health, India has cooperated with a number of countries including Afghanistan, Bangladesh, Bhutan, Myanmar, Nepal and Sri Lanka.

9. In September 2013, India hosted the 31st WHO SEARO Health Ministers meeting which focussed on a number of issues including a Regional Action Plan for prevention and control of non-communicable diseases, Pandemic Influenza Preparedness etc. In January 2013, the 2nd BRICS Health Ministers meeting adopted the Delhi Communiqué for increased cooperation amongst BRICS countries in the field of health.

10. At the SAARC Summit in Kathmandu on 26 November 2014, India's Prime Minister announced India's support for SAARC in meeting the short fall in funds for establishing the SAARC Regional Reference Laboratory for TB and HIV, vaccines for children, monitoring and surveillance of polio free countries and provide vaccines where Polio might reappear and immediate visas for those seeking medical treatment in India

11. India announced a contribution of more than US $ 12 million to the Ebola Response Multi Partner Trust Fund, the WHO and the purchase of protective gear for addressing the recent Ebola Disease outbreak. In August 2014, India had provided immediate bilateral financial assistance for purchase of medical supplies to three of the affected countries – Sierra Leone, Liberia and Republic of Guinea. Diagnostic support was provided to Sri Lanka through WHO-SEARO for diagnosis of suspected Ebola.

12. India has a well-established pharmaceutical industry and is a major exporter of high quality and affordable pharmaceutical drugs and vaccines. A case in point are generic drugs

which have resulted in dramatic reduction in cost of treatment, for instance of HIV/AIDS. India has emphasized the importance of access to affordable, quality, safe medicines, vaccines and medical equipment to all, in particular those in developing countries through appropriate policies and regulations.

13. While international exchanges are an important pillar for implementation of Article X, and considerable progress has taken place in recent years, there exist gaps in access to and availability of advanced technologies for application in peaceful uses, for example, in obtaining equipment or materials, training opportunities, obtaining clinical samples or access to affordable medicines and vaccines and complex visa procedures for scientists which hinders timely and regular collaboration in areas of common interest to the scientific community. There is need for efforts in the context of the BWC to identify and overcome obstacles in implementation of Article X to generate equitable benefits for States Parties, in particular developing countries.

14. The implementation of Article X should facilitate the fullest possible exchange of equipment, materials and technology related to the use of biological agents and toxins for peaceful purposes. Strengthened implementation of Article III would ensure that the cooperation envisaged under Article X is not abused. Thus effective national export controls are important tools to prevent the misuse of biological agents and toxins for purposes prohibited by the Convention or falling into the hands of terrorists. India is committed to maintaining effective export controls on par with the highest international standards with respect to transfers of biological agents and toxins for peaceful purposes.

15. India supports the introduction of the standing agenda item for the 2012-2015 inter-sessional programme on Cooperation and Assistance with particular focus on implementation of Article X and has actively contributed to discussions on this agenda item.